November 14, 1973

Mr. John Searcy
Tennessee Public Service Commission
Cordell Hull Building
Nashville, TN 37219

Dear Mr. Searcy:

In your letter of October 3, 1973, you requested interpretations of various sections of Part 192, Title 49, CFR, that related to maximum allowable operating pressures (MAOP), certain test requirements, and uprating. Your specific questions and the Office of Pipeline Safety (OPS) answers are:

Question 1: Re: Maximum allowable operating pressures

"192.619(a)(2) requires that test pressure valves be used as criteria for determining maximum allowable operating pressures; however, it applies only to steel operating at or above 100 psi and plastic.

"192.621 covers all materials including cast iron and ductile iron; however, it does not require that test pressure values be used as criteria for determining maximum allowable operating pressures.

"Therefore, I conclude that, for steel operating below 100 psi and for cast iron and ductile iron operating at any pressure, test pressure valves are not required criteria for determining maximum allowable operating pressures. Is this your interpretations?"

Questions 2: Re: Test requirements

"192.507(b) provides test requirements for pipelines of all materials operating at or above 100 psi and less than 30% SMYS and requires test pressure valves between 100 psi and those required to produce 20% SMYS. However, it does not specify what the values will be. 192.619 would determine the test pressure values within this range for steel and plastic by relating them to maximum allowable operating pressure. However, 192.619 does not apply to cast iron and ductile iron.

"192.509 covers pipelines of all materials operating at or below 100 psi, and requires 10 psi or 90 psi as test pressures.

"The conclusion here would be that values of test pressures can be established in any pressure range for steel and plastic, and for cast iron and ductile iron operating at or below 100 psi; however, there is no required test pressure valve for cast iron and ductile iron operating above 100 psi. Is this the proper interpretation?"

Answer to Questions 1 & 2

Test requirements for pipelines to operate at or below 100 psig is established by Section 192.509 based upon the intended MAOP and is applicable with the exception of service lines and plastic pipe. Cast iron and ductile iron pipelines would be included under this section if the intended MAOP is 100 psig or less.

For pipelines to operate at a hoop stress of less than 30 percent SMYS but more than 100 psig, Section 192.507 is applicable, with limitations on the MAOP for steel and plastic pipelines being set by Section 192.619.

Your interpretation is correct. There is no specific test pressure required for cast iron and ductile iron operating above 100 psig and up to 30 percent of SMYS. However, the operator must comply with the requirements of Sections 192.507 and 192.53.

Question 3: Re: Uprating

"192.557(c) provides that an increase in maximum allowable operating pressure must be made in increments. However, the following questions arise:

"(1) If the maximum allowable operating pressure it to be increased within the 1 psi to 100 psi range, and no test records are available, must it be tested to 90 psi first, in accordance with 192.509, and if so, must the test pressure be approached in the increments specified in 192.557(c)?

"(2) Or, does 192.557(c) require only that the new maximum allowable operating pressure itself be approached in the increments required?

Answer to Question 3

Section 192.557(c) requires only that the new MAOP be approached in increments. In uprating, the pretest to 90 psig would or be required.

If we may assist further, please let us know.

Sincerely,

/signed/ Cesar De Leon

Joseph C. Caldwell
Director
Office of Pipeline Safety

DB/dal/192.509
73-11-14